

## PACKET PROCESSOR WITH REAL-TIME EDIT PROGRAM CONSTRUCTION ENGINE

## ABSTRACT

A switch includes one or more programmable packet switching  
5 controllers. The programmable packet switching controller has a  
real-time edit program construction engine. The edit program  
construction engine receives packet data, e.g., the header data,  
and disposition decisions generated by, for example, an  
application engine. The edit program construction engine uses  
10 the packet data and the disposition decisions to construct edit  
programs in real-time. The edit programs include a number of  
instructions for performing operations, such as COPY, DELETE,  
RECORD, PLAYBACK, INSERT and OVERWRITE, and are stored in an  
instruction RAM associated with an edit engine. The edit engine  
15 executes the instructions to modify inbound packets in order to  
transmit them as outbound packets.